DOCUMENT RESUME

ED 157 668 88 RC 010 646

AUTHOR Askins, Billy E.; And Others
TITLE Responsive Environment Early Education Program (REEEP): Third-Year Evaluation Study. Final Evaluation Report, 1977-78.
INSTITUTION Askins (B.E.) and Associates, Lubbock, Tex.; Clovis Public Schools, N. Mex.
SPONS AGENCY New Mexico State Dept. of Education, Santa Fe.; Office of Education (DHEW), Washington, D.C. Projects to Advance Creativity in Education.
PUB DATE May 78
NOTE 33p.; For related document, see ED 142 351

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS *Academic Achievement; *Academically Handicapped; Bilingual Students; Demonstration Programs; *Early Childhood Education; *Handicapped Students; Information Dissemination; Inservice Teacher Education; *Intervention; Language Development; Preschool Education; Program Evaluation; Program Validation; Self Concept; *Spanish Americans
IDENTIFIERS *New Mexico (Clovis)

ABSTRACT

REEEP serves as an educational intervention providing direct services to "high risk" (of low birth weight--less than 5 1/2 pounds) 3-, 4-, and 5-year-old children, living in the Clovis, New Mexico area. The program aims: to prevent school failure with an intervention program which includes early identification and remediation of developmental learning deficiencies and to integrate handicapped children into the regular school program; to provide inservice training for the project teacher and aide; to disseminate information concerning the program. Student achievement was evaluated via standardized tests to measure language development in Spanish and English, school readiness, and self-concept. Program impact was determined by a special regression analysis model using three dependent variables and eight independent variables. Inservice training and dissemination activities were subjectively evaluated using site visits, observations, records, and self-reports by the staff. Major findings included: REEEP students made significant gains in language development in English and Spanish and in school readiness; students showed a positive and continuous growth concerning self-concept and emotional development; the inservice training was found to be successful and effective; the quantity and quality of the dissemination activities were adequate; the regression analysis data indicated that 60% of the students scored better than estimated/expected on the English test, 40% scored better than estimated/expected on the Spanish test, and 70% scored better than estimated/expected on the school readiness test. (Author/NQ)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

rec 05-09-78

ED157668

FINAL EVALUATION REPORT
1977-78

RESPONSIVE ENVIRONMENT EARLY EDUCATION PROGRAM (REEEP):

THIRD-YEAR EVALUATION STUDY

Funded by:

Clovis Municipal Schools, Clovis, New Mexico
ESEA, Title IV-C
New Mexico State Department of Education
Santa Fe, New Mexico

Under contract with:

Clovis Municipal Schools
800 Pile Street
Clovis, New Mexico

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Billy E. Askins

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

PS 010648

Prepared by:

B. E. Askins and Associates
Box 4224, Texas Tech University
Lubbock, Texas 79409

May, 1978

CLOVIS MUNICIPAL SCHOOLS

Board of Education

Mr. Wilbur Johnson, President

Mr. Harry Eastman
Mr. Jacob Moberly
Mr. Billy Neal Williams
Mr. Charles Guthals

Dr. L. W. Byous, Superintendent of Schools
Mr. Davenport Beasley, Assistant Superintendent

Members of the Professional Advisory Board

Dr. Gilbert Delgado, Dean
Graduate School
Gallaudet College
Washington, D. C.

Mrs. Oralie McAfee
Early Childhood
Metropolitan State College
Denver, Colorado

Mr. Henry Pascual, Director
Director of Title VII, Bilingual Education
Technical Assistant Unit
State Department of Education
Santa Fe, New Mexico

Mr. Harry Wugalter
Chief, Public School Finance Division
Secretary for Education
State Capitol Building
Santa Fe, New Mexico

Faculty/Staff

Mr. Ted Olmos, Director
Ms. Katherine McAlvay, Teacher
Ms. Julia Robertson, Secretary
Ms. Sally Romero, Aide

EVALUATION TEAM MEMBERS

Dr. Billy Askins, Coordinator of Evaluation
Dr. Joe D. Cornett, Statistician
Dr. Ralph Carter, Consultant
Mr. Larry Johnson, Consultant
Mrs. Frankie Cook, Secretary/Administrative Assistant

DOCUMENT RESUME

TITLE: Responsive Environment Early Education Program (REEEP): Third Year Evaluation Study, End of Year Evaluation Report, 1977-78

INSTITUTION: Assess (B.E.) and Associates, Lubbock, Texas: Clovis Public Schools, New Mexico; Texas Tech University

SPONS. AGENCY: New Mexico State Department of Education and ESEA (Title IV-C), DHEW/OE, Washington, D.C.

PUB. DATE: May, 1978

RELATED DOC: ED 127 058
ED 142 351
ED 127 057
ED 142 352

DESCRIPTORS: Preschool Education; Low Birth Weight Children; Academically Handicapped; Intervention; Demonstration Program; Bilingual Education; Handicapped Students; Language Development; School Readiness Tests; Self-Concept; Social Development; Program Evaluation.

ABSTRACT: This report is the results of the third year and final external evaluation of a continuing evaluation study of the Responsive Environment Early Education Program (formerly the Responsive Environment Program for Spanish American Children- REPSAC). This program served as an educational intervention providing direct services to "high risk" (low birth weight-less than 5½ pounds) 3-, 4-, and 5-year-old children, living in the area served by the Clovis Municipal Schools, Clovis, New Mexico.

The major goals for the program were (1) To prevent school failure with an intervention program which

includes early identification and remediation of developmental learning deficiencies and to integrate handicapped children into the regular school program; (2) To provide in-service training for the project teacher and teacher-aide; and (3) to disseminate information concerning the program. The design for the external evaluation during 1977-78 was based upon the program objectives as pertains to: student achievement; in-service training; and dissemination activities. As concerns student achievement (pre and posttests using standardized tests to measure language development in Spanish and English, school readiness, and self-concept), program impact was determined by a special regression analysis model using three dependent variables and eight independent variables. In-service training and dissemination activities were subjectively evaluated using site visits, observations, records, and self-reports by the staff.

Major findings included: (1) Students participating in REEEP made significant gains in language development in English and Spanish and in school readiness; (2) students showed a positive and continuous growth as concerned self-concept and emotional development; (3) The regression analysis data indicated that 60% of the students scored better than estimated/expected on the

English test (PPVT), 40% scored better than estimated/ expected on the Spanish test (TACL), and 70% scored better than estimated/expected on the school readiness test (RTDC). Also, it was found that the highest correlation of any of the independent variables was the educational level of the mother; (4) The in-service training provided to the teacher and aide was found to be successful and effective; and (5) The quantity and quality of the dissemination activities of the project were adequate.

Findings of the follow-up of former students in the program are reported in a separate study.

FOREWORD

This evaluation report describes the effect of the Responsive Environment Early Education Program (REEEP) during the 1977-78 school year. This is the final report for the project as 1977-78 was the final year of funding.

This report is the result of a continuing external evaluation study (1970-78) conducted by B. E. Askins and Associates which is an independent consultant and service organization with its direction primarily through various faculty members of the College of Education, Texas Tech University.

This report was prepared and submitted in accordance with the approved Continuation Evaluation Proposal for 1977-78 dated August 19, 1977 and the Educational Evaluation Agreement dated September 9, 1977.

Billy E. Askins

Billy E. Askins, Ed.D.
Coordinator of Evaluation
May, 1978

TABLE OF CONTENTS

	Page
LIST OF TABLES AND FIGURES	i
SECTION	
I. INTRODUCTION	1
Purpose of Program	1
Development of the Program	1
II. DESCRIPTION OF THE PROGRAM	3
Target Children and Criteria for Selection	3
Faculty/Staff/Advisory Board	3
Goals and Objectives	3
Goals	3
Objectives	4
Program Activities	5
Instructional	5
In-Service	5
Dissemination	6
Outreach	6
III. EVALUATION DESIGN	7
Student Achievement	7
Evaluation Model	7
Procedure and Time-Schedule for Collecting Data	8
Analytical Procedures	8
In-Service Training	8
Dissemination	9
Summary of the Evaluation Plan	9
Site-Visits By Evaluation Team	9
IV. EVALUATION DATA	11
Student Achievement	11
Language Development in English	11
Language Development in Spanish	11
School Readiness	12
Regression Analysis	13
Self-Concept and Emotional Development	15
In-Service Training	16
Dissemination Activities	16
V. SUMMARY OF EVALUATIVE INFORMATION AND CONCLUSIONS	18
Summary of Evaluation Information	18
Conclusions	19
BIBLIOGRAPHY	20
APPENDIX	22
A - Description of Tests	22

LIST OF TABLES AND FIGURES

Tables

		Page
1	Performance of Students in REEEP	12
2	Correlations Between Posttest Performance and Selected Student Variables	13

Figure

1	Comparison of Predicted and Actual Performance on the PPVT (English)	14
2	Comparison of Predicted and Actual Performance on the TACL (Spanish)	14
3	Comparison of Predicted and Actual Performance on the RTDC (Readiness)	14
4	Personal Development Profile for REEEP Students	15

SECTION I

INTRODUCTION

This report describes an external evaluation study of the Responsive Environment Early Education Program (REEEP) during the 1977-78 school year. This report is part of a continuation study by an independent consultant and service organization with its direction primarily through various faculty members of the College of Education, Texas Tech University.

Purpose of the Program

This program was designed to serve as an educational intervention providing direct services to approximately 40 high risk 3-, 4-, and 5-year old children, including the integration of handicapped children, living in the area served by the Clovis Municipal Schools, Clovis, New Mexico. Children were considered "high risk" as a result of their low birth weight, 5½ pounds or less, and who would probably have accompanying handicaps as they enter the first grade. This program attempted to demonstrate that such an early intervention could provide such children the experiences necessary to succeed and remain in the educational mainstream.

After completing REEEP (1-3 years depending upon the child's age at entry), the children entered the first grade. A follow-up study was conducted on these students as they entered the mainstream of formal education (Grades 1-6). The results of the follow-up study are presented in the evaluation reports pertaining to the outreach activities (11, 12, and 13).

Development of the Program

In developing, the program (formerly the Responsive Environment Program For Spanish American Children - REPSAC) drew heavily upon various experimentally developed models in early childhood education including: the New Nursery School, Northern Colorado University; the responsive environment concept of Omar K. Moore; Project LIFE (Language Instruction to Facilitate Education); the Piaget Early Childhood Curriculum, and various parent involvement programs throughout the nation. In addition, the program partly adapted the Early Prevention of School Failure Model, a nationally validated Title III ESEA developer-demonstrator project (Peotone, Illinois). Thus, beginning with the school year 1975-76, this program was an adaptation of the former Responsive Environment Program for Spanish American Children (REPSAC) and the Early Prevention of School Failure Project.

The rationale for the design and development of REPSAC emanated from research which indicated that children with a low birth weight, coupled with other factors, generally experience childhood difficulties in the

cognitive areas of development which can result in subsequent retardation as they progress through their formal education. Spanish American children with such a low birth weight coupled with a language different from that used in the American educational setting, have additional handicaps. Further, Spanish American children with the foregoing handicaps whose home environment often does not include toys, materials, games, and media which can enrich their childhood experiences enter the first grade with a notable disadvantage in comparison to children with such advantages.

Recognizing that approximately 22% of the total school population of Clovis, New Mexico were children with a Spanish surname and that approximately 39% of children enrolled in special education were of Spanish origin, and accepting the premise that a high percentage of "high risk" children come from this particular ethnic group, the idea of an early educational intervention became a reality in the form of REPSAC. REPSAC officially started in September, 1971 with 32 students and operated four years (1971-75) serving low birth weight Spanish American children.* Beginning with school year 1975-76, the name of the program was changed to the Responsive Environment Early Education Program (REEEP) and was expanded to serve low birth weight children of all ethnic groups.*

---

*For references pertaining to evaluation results of REPSAC and REEEP during these years, see Bibliography 4-7 and 8-10.

SECTION II

DESCRIPTION OF THE PROGRAM

Beginning with the 1977-78 school year, the program was moved to the Bella Vista Elementary School, Clovis Municipal Schools. The physical facilities of the program consisted of one classroom and an adjoining administrative office.

Target Children and Criteria for Selection of Participants

The target group children of the program were 3-, 4-, and 5-year-old low birth weight children who were considered educationally handicapped. Criteria used to select children to participate in the program were: 1) Low birth weight - 5½ pounds or less; 2) Health history of child; 3) Level of education of parents; 4) Educational attainment of siblings; 5) Home language - Spanish or English; and 6) Income of family.

Faculty/Staff/Advisory Board

The faculty/staff of REEEP consisted of: the director; one certified teacher; and one teacher-aide.

In addition to the regular faculty/staff, there was a Professional Advisory Board. The purpose of the Professional Advisory Board was to provide the director with guidance and direction of the activities of the program and the development of the various program components. The board consisted of individuals who could provide expertise in the fields of special education, early childhood education, bilingual and bicultural education, educational technology, and the responsive environment concept.

Goals and Objectives

The following goals and objectives gave direction for the development, administration, and evaluation of the program.

Goals

The major goals of the program were:

1. To prevent school failure with an intervention program which includes early identification and remediation of developmental learning deficiencies and to integrate handicapped children into the regular school program.

2. To provide in-service training to the project teacher and teacher-aide.

3. To disseminate information concerning the program.

Objectives

The major objectives of the program were:

At the end of the academic year, the students will be able to:

1.1 Demonstrate language ability in English which is normally expected at their age level. Evidence of achievement will be determined from significant gain scores of the Peabody Picture Vocabulary Test. (Cognitive)

1.2 Demonstrate language ability in Spanish which is normally expected at their age level. Evidence of achievement will be determined from significant gain scores of the Test for Auditory Comprehension of Language - Spanish. (Cognitive)

1.3 Demonstrate school readiness in such areas to include: listening ability; visual acuity; and recognition of similarities, differences, and numerical analogies. Evidence of achievement will be determined from significant gain scores of the Readiness Test for Disadvantaged Children. (Cognitive)

1.4 Exhibit a positive self-concept and favorable emotional development. Evidence of such behavior will be determined from rating from the Developmental Profiles which involve periodic teacher evaluations in six areas of the affective domain: awareness of self, self-confidence, interpersonal comprehension, sensitivity to othere, effectiveness, and tolerance. Evidence of growth/development for each age-level will be determined from individual profile sheets plotted in terms of direction and rate of growth/development. (Affective)

2.1 Upon completion of various in-service training sessions, the teacher and aide will be able to employ various aspects of the curriculum in their own educational settings so as to meet the needs of children with developmental lags and learning deficiencies. This will include incorporating the approaches of Piaget and Montessori, using various materials such as the Project LIFE materials, and using the responsive environment typing booth. Evidence of achievement will be determined by observations.

3.1 Information concerning the programs and operation of the program will be disseminated by various means such as:

a. Progress reports to the LEA central office, school board, and local area news media.

b. Site-visitation by interested individuals and groups both from in and out-of-state.

c. Copies of the end-of-year Evaluation Report will be disseminated throughout the state and nation including the Educational Resources Information Center (ERIC).

Program Activities

Activities of the program were classified as: instructional; in-service; dissemination; and outreach.

Instructional Activities

The instructional activities of the program were conducted in two half-day sessions five days a week. Approximately twenty students attended the morning session and twenty students attended the afternoon session. The students were transported to and from school by a small bus provided by the program.

Specific learning activities were planned for the children for each three-hour day. These learning activities could be generally classified into group activities (story telling, reading, painting, cutting, manipulative toys, playground activities, and the lunch period) and individualized or small group activities (Piaget-Early Childhood Curriculum, Project LIFE, Responsive Typing Booth, and the Peabody Language Development Kit).

Eating the noon meal with attendant language involvement was developed as a learning activity: therefore, all of the students were served a hot lunch. The morning group was served prior to leaving school, and the afternoon group was served immediately upon arrival for the afternoon session.

In-Service Activities

The majority of the in-service activities for the teacher and aide was considered as a part of the outreach activities (described later). Other types of in-service activities included: attendance at various workshops; formal and informal sessions with various consultants, including members of the external evaluation team; professional readings, and regularly scheduled faculty meetings.

Dissemination Activities

Activities which served as means to disseminate information concerning the program included: preparation of various brochures; presentation of paper at professional meetings; newspaper releases; progress reports to the funding agency, central administration office and school board; site visitation by interested groups and individuals; various speaking engagements by the director; and copies of the evaluation report were distributed throughout the state and nation including the Educational Resources Information Center (ERIC - Clearinghouse on Rural Education and Small Schools).

Outreach Activities

Beginning with school year 1975-76, the outreach activities component was added to REEEP.* The purpose of adding the outreach activities to the parent center was to give the program capability of providing replication services to various local education agencies. A unique feature of this replication service was the capability of taking the training to the replication centers by a specially designed and equipped motor coach.

The outreach activities component was designed to have three major functions; advisory and training, diffusion, and evaluation.

The evaluation of the outreach activities also included a follow-up study of former REPSAC students as they entered the mainstream of education (grades 1-6). The school year 1977-78 was the completion of the fourth year of this follow-up study. The results of the follow-up study are presented in the year-end evaluation report pertaining to the outreach activities (11, 12 and 13).

---

*The outreach activities of REEEP was funded by the Handicapped Children's Early Education Program, Bureau of Education for the Handicapped, U. S. Office of Education, Grant No. G00-75-00079.

SECTION III

EVALUATION DESIGN

The design for the external evaluation during 1977-78 was based upon the program objectives as pertains to: student achievement (1.1-1.4); in-service training (2.1); and dissemination activities (3.1). Evaluation procedures for each of these objectives are described in the following paragraphs.

Student Achievement

Evaluation Model

Objectives pertaining to student achievement were evaluated using the model as described in the report, Development of Data Collection and Analysis Procedures (New Mexico Title III, ESEA Advisory Council, May, 1976).

These data collection and analysis procedures involved the use of a special regression analysis model which can assist in determining the impact of selected program and personal variables on achievement of the program participants. The use of this type of model was necessary because of the non-availability of a comparison or control group. This model can be depicted as:

$$Y^1 = X_1 + X_2 \text{---} X_n$$

Where:

Y^1 = measure of program objective
$X_1 \text{---} X_n$ = program and personal variables

The dependent variables, measures of the objectives pertaining to student achievement, were:

1. Language development in English as measured by the Peabody Picture Vocabulary Test (Dunn).

2. Language development in Spanish as measured by the Test for Auditory Comprehension of Language - Spanish (Carrow).

3. School readiness as measured by the Readiness Test for Disadvantaged Children (Walker).

A description of the tests is included as Appendix A.

The independent variables used in this model were:

1. Sex
2. Pre and posttest scores
3. Birth weight
4. Income level of family
5. Year in program
6. Age
7. Educational level of the mother
8. Educational level of the father

Procedures and Time-Schedule for Collecting Data

The participants were tested before and after the treatment (instructional activities) and statistical significance was determined on the difference. (Exception was the Developmental Profiles).

Data to evaluate the self-concept was collected with the use of the Developmental Profiles. This instrument was completed for each student three times during the year by the teacher.

Dates for administering the pretests were September 6-9, 1977, and the posttests were administered May 8-12, 1978. The Developmental Profiles were completed during September, February, and May. All tests were administered by the project staff.

Analytical Procedures

As concerns student achievement, progress in each area was determined by the amount of gain achieved between the pretest and posttest. The differences were statistically treated using the t-test with significance being determined at the .05 level.

As concerns the assessment of self-concept and emotional development, group change was determined by taking an average of the individual ratings on the Developmental Profile for each of the six areas evaluated.

In-Service Training

The in-service training pertained to the project teacher and aide.

The major objective of this training was for the teacher and aide to improve certain knowledge and skills so as to be more effective while working with young, high risk, handicapped, and vulnerable children using the concept and processes of responsive environment.

A variety of measures were used to collect data to evaluate this objective which included: classroom visits, self-evaluation report, a

review of various types of records maintained by the teacher, and interviews with the project director.

Dissemination

Evaluation of the objective pertaining to the dissemination of information was the assessment of the quality and quanity of the dissemination materials.

Summary of the Evaluation Plan

A summary of the evaluation plan for 1977-78 is depicted on the following page. A description of the various tests referenced on the summary page can be found in Appendix A.

Site Visits By Evaluation Team

As part of the external evaluation, site-visits to the project were conducted by the evaluation team on the following dates:

Date	Name	Purpose
11-12 Aug 77	Askins	Prepare for pretesting
26 Aug 77	Cornett, Carter	Train teacher for pretesting
8- 9 Sept 77	Askins, Carter	Observe pretesting
30 Sept 77	Askins, Cornett	Site-visit/classroom
6- 7 Oct 77	Askins, Carter	Site-visit and pick up pretests
18-19 Oct 77	Askins, Cornett	Site-visit/classroom
2 Dec 77	Askins, Johnson	Site-visit/director
7 Dec 77	Askins	Site-visit/classroom
16 Dec 77	Askins	Site-visit/director
22 Dec 77	Askins	Site-visit/classroom
9 Feb 78	Askins, Cornett	Site-visit/director
22 Feb 78	Askins, Johnson	Site-visit/audit
10 Mar 78	Askins, Cornett	Site-visit/director
7 Apr 78	Askins, Carter	Site-visit/prepare for posttesting
20 Apr 78	Askins	Site-visit/deliver posttests
4 May 78	Askins, Carter Cornett	Site-visit/posttesting
16 May 78	Askins	Site-visit/visit with state dept. pers.

EVALUATION PLAN SUMMARY CHART

District: Clovis, New Mexico
Project: Responsive Environment Early Education Program
Evaluator: B. E. Askins & Associates
Date: 1977-78

OBJECTIVE	EVALUATION ACTIVITY	SAMPLE OR TARGET GROUP	INSTRUMENTATION		DATA COLLECTION		ANALYTICAL PROCEDURE
			INSTRUMENT*	DATE(S)	RESPONSIBILITY	DATE	
1. Student Achievement	1.1 Measure language development in English on pre and posttest basis.	100% of subject group (N=40)	PPVT(Form A) PPVT(Form B)		Teacher	9/9/77 5/10/78	Regression analysis
	1.2 Measure language development in Spanish on pre and posttest basis.	100% of subject group (N=40)	TACL(Form A) TACL(Form A)		Teacher Teacher	9/9/77 5/10/78	Regression analysis
	1.3 Measure degree of school readiness on pre and posttest basis.	100% of subject group (N=40)	RTDC(Form A) RTDC(Form B)		Teacher Teacher	9/9/77 5/10/78	Regression analysis
	1.4 Evaluate self-concept and emotional development during 3 month intervals.	100% of subject group (N=40)	DP		Teacher/Evaluator	9/15/77 2/15/78 5/15/78	Statistical summary
2. In-service Training	2.1 Assess effects of in-service training sessions.	100% of teachers and aides (N=2)	Self evaluation reports Site-visits Written exams		Director/Evaluator	After each session & end of year	Narrative summary
3. Dissemination	3.1 Assess the quality & quantity of dissemination materials.	N/A	Observations, Number of news releases. Number of professional articles. Quality of training films.		Director/Evaluator	End of year	Narrative summary

*LEGEND
PPVT= Peabody Picture Vocabulary Test (Dunn)
TACL= Test for Auditory Comprehension of Language (Carrow)
RTDC= Readiness Test for Disadvantaged Children (Walker)
DP= Developmental Profiles (Bessel and Palomares)
(See Appendix A for description of instruments)

SECTION IV

EVALUATION DATA

The evaluation design focused upon the program objectives as pertained to student achievement (1.1-1.4), In-Service Training (2.1), and Dissemination (3.1). Evaluation data pertaining to these objectives are presented in the following paragraphs.

Student Achievement

Objectives 1.1-1.3 were objectively measured with standardized tests using a pre and posttest design with a regression analysis. Thirty-three students were pretested (100%) and 28 students (85%) were available for both pre and posttests. The students were measured (by the teacher and aide) at the beginning of the school year (September 6-9, 1977) on the three areas. At the end of the year (May 8-12, 1978), the students were again measured in the same areas. Progress in each area was determined by the amount of gain achieved between the pretest and posttest. The differences were statistically treated using the t-test with significance being determined at the .05 level. In addition, a regression analysis was conducted to determine the impact of selected program and personal variables on posttest performance.

Objective 1.4 pertained to the assessment of self-concept and emotional development. The Developmental Profiles were completed by the teacher three times during the year, September, February, and May. Group change was determined by taking an average of the individual ratings on the Developmental Profile for each of the six areas evaluated.

Language Development in English

Data analyzed from a pre and posttest analysis indicated that the students made significant gains in language development in English. The mean gain was 14.00 ($p < .01$). This gain was approximately the same as 1976-77 (MG=15.49, $p < .001$). Pre and posttest means and standard deviations are presented in Table 1.

Based on these data, it was concluded that the objective pertaining to language development in English (1.1) was achieved.

Language Development in Spanish

Data analyzed from a pre and posttest analysis indicated that the students made significant gains in language development in Spanish. The mean gain was 27.71 ($p < .01$). This gain was much better than for 1976-77 (MG=18.21,NS). Pre and posttest means and standard deviations are presented in Table 1.

Based on these data, it was concluded that the objective pretaining to language development in Spanish (1.2) was achieved.

School Readiness

Data analyzed from a pre and posttest analysis indicated that students made significant gains in school readiness. The mean gain was 10.10 ($p < .01$). This gain was not as great as for 1976-77 (MG=17.89, $p < .001$). Pre and posttest means and standard deviations are presented in Table 1.

Based on these data, it was condluded that the objective pertaining to school readiness (1.3) was achieved.

TABLE 1

PERFORMANCE OF STUDENTS IN REEEP

TEST/OBJECTIVE	N	MEANS	MEAN GAIN	s	t
PPVT/English	27	Pre 35.33 Post 49.33	14.00	12.77 8.70	- 8.36*
TALC/Spanish	24	Pre 39.58 Post 67.29	27.71	22.58 11.88	-11.00*
RTD/Readiness	28	Pre 26.04 Post 36.14	10.10	8.01 10.11	- 6.99*

*($p < .01$)

Regression Analysis

A regression analysis was conducted to determine the relationship between pretest performance, selected personal factors, and performance in English, Spanish,and school readiness. Table 2 presents the correlations between the independent variables of pretest performance, sex, family income, and education of mother. As noted in the table, the strongest relationship was the educational level of the mother accounting for 21% on the RTDC (readiness), 28% on the PPVT (English), and 21% on the TACL (Spanish).

TABLE 2

CORRELATIONS BETWEEN POSTTEST PERFORMANCE AND SELECTED STUDENT VARIABLES

POST TEST	PRE TEST	SEX	FAMILY INCOME	EDUCATION MOTHER	R	R^2
RTDC	.31	.06	-.30	.46	.56	31
PPVT	.36	.14	.21	.41	.53	28
TACL	.41	.03	.25	.33	.46	21

Figures 1, 2, and 3 show the actual performance of students on the three measures compared to the predicted line of performance. The percentage of students performing above and below the expected/estimated are presented in clusters. It can be noted that 60% of the students scored better than expected on the PPVT (English), 40% scored higher than estimated on the TACL (Spanish), and 70% scored better than expected on the RTDC (readiness).

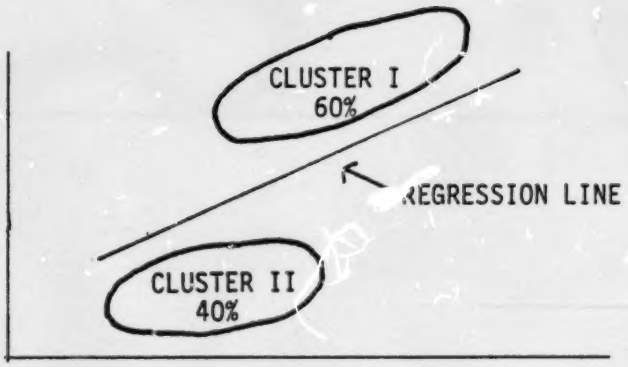

FIGURE 1. COMPARISON OF PREDICTED AND ACTUAL PERFORMANCE ON THE PPVT (English)

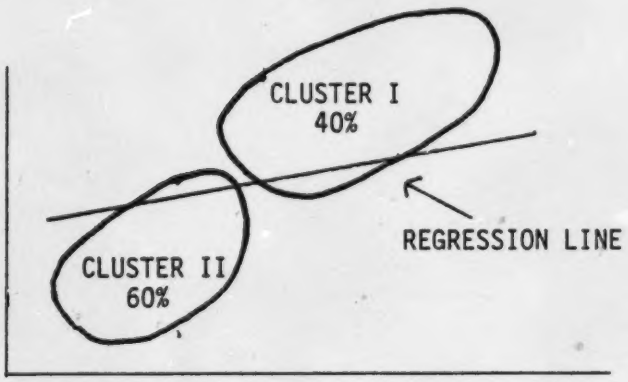

FIGURE 2. COMPARISON OF PREDICTED AND ACTUAL PERFORMANCE ON THE TACL (Spanish)

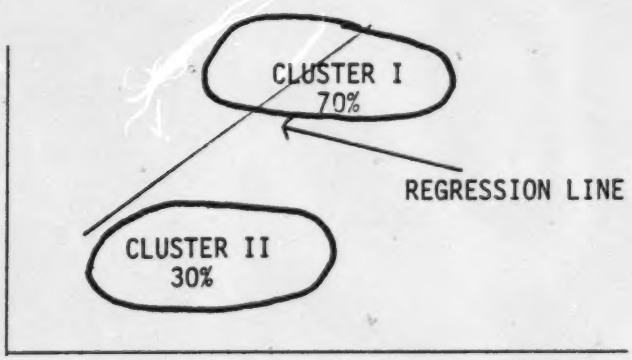

FIGURE 3. COMPARISON OF PREDICTED AND ACTUAL PERFORMANCE ON THE RTDC (Readiness)

Self-Concept and Emotional Development

Objective 1.4 pertained to developing a positive self-concept and emotional development. Data were gathered on this objective from subjective ratings at three time intervals by the teacher. Means are presented for each scale. As indicated in Figure 1, students in the program indicated substantial progress in self-concept and emotional development; therefore, it was concluded that the objective pertaining to self-concept was achieved.

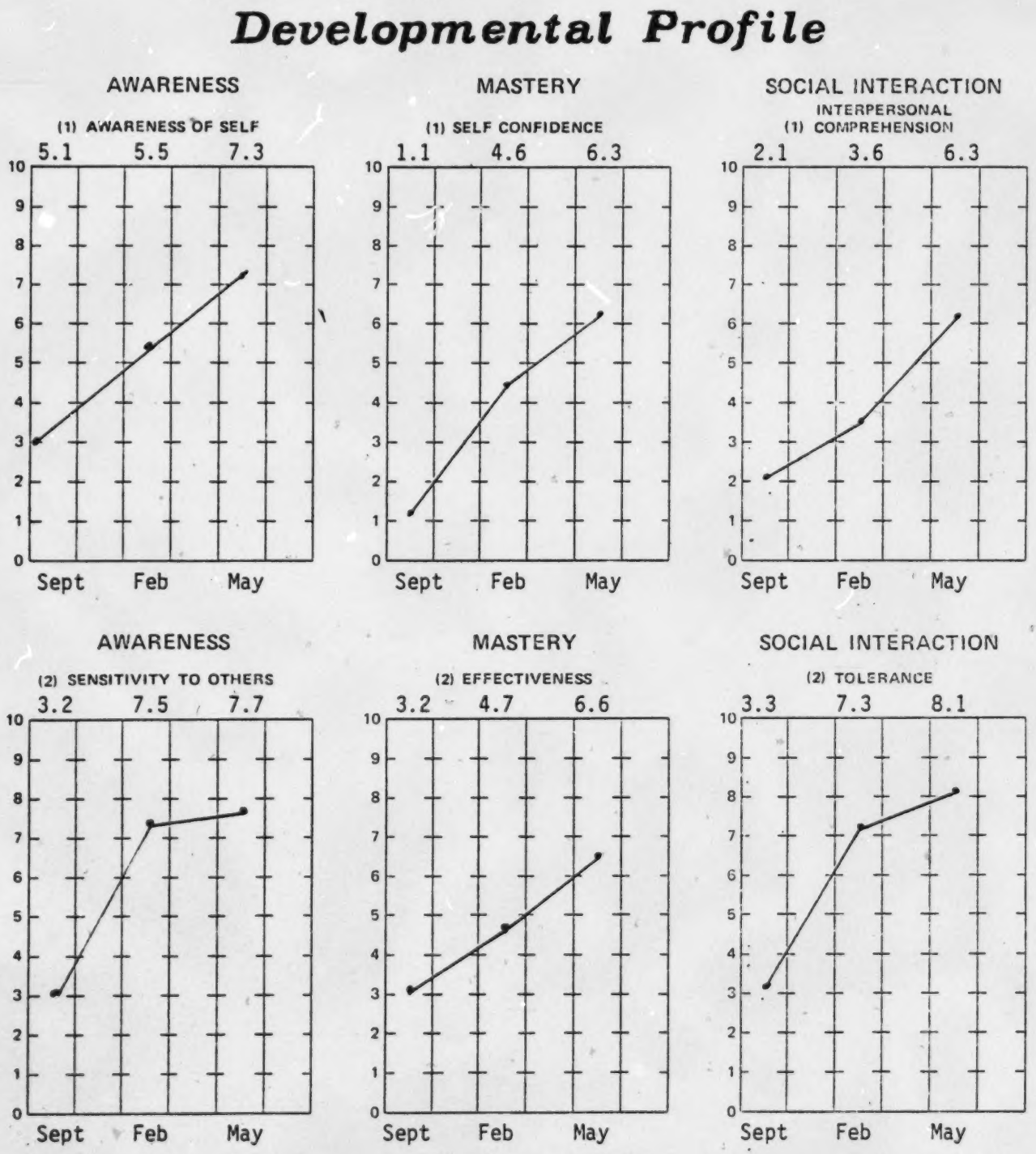

FIGURE 4. PERSONAL DEVELOPMENT PROFILE FOR REEEP STUDENTS

In-Service Training

Objective 2.1 pertained to the in-service training of the teacher and teacher-aide. This training was originally planned to be part of the outreach training to be provided to 50 teachers to be brought to the parent center during the year; however, this outreach training was canceled. Thus, the program of in-service training was changed to include only the project teacher and aide.

The revised in-service training consisted of attending various workshops, individual conferences, individual readings, and regular faculty meetings. Topics of the workshops included: Student Testing, Multi-Cultural Activities, and Bilingual Education. Individual conferences included: outreach educational diagnostician, members of the evaluation team, representatives from the New Mexico State Department of Education, and the project director. The selected readings were from materials made available from the library containing materials of the Title VII, IVC, and VI projects.

Based upon observations and the self-evaluation reports, it was concluded that the objective pertaining to the in-service training (2.1) was satisfactorily achieved.

Dissemination Activities

Objective 3.1 pertained to the quantity and quality of dissemination of information concerning the project. Information concerning the project during the 1977-78 school year was disseminated as described in the following paragraphs.

Progress reports were made available to the central administration office, school board, local area news media, and to the State Department of Education.

A major paper was presented by the evaluator concerning the project at the annual meeting of the American Educational Research Association, Toronto, Canada, March, 1978 (18).

The training film describing the project was shown on numerous occasions to civic groups, and to graduate and undergraduate education classes at Texas Tech University and Eastern New Mexico University.

Site visitations were made by various professional individuals and groups as well as parents. This included graduate students in teacher education from Texas Tech University and Eastern New Mexico University, and students from the local high school.

Copies of the 1976-77 end-of-year evaluation report were disseminated throughout the states of New Mexico and Texas. This report was accepted into the network of the Educational Resources Information Center (ERIC) in the Clearinghouse of Rural Education and Small Schools (See Bibliography 9). Also, it should be noticed that the end-of-year evaluation reports of the project for each year since 1971-72 are now in the ERIC system (4, 5, 6, 7, 8, 9, and 10). In short, the following number of activities, papers, and reports have been published concerning the project: 6 articles in various professional journals, 3 papers presented at national organizations, and 10 reports in the ERIC system.

In addition to the above, much information concerning the project was disseminated by the outreach component during the various school visits throughout the year.

Based upon this information, observations, and interviews with various school personnel, it was concluded that the quality and quantity of disseminated materials were adequate. Therefore, it was concluded that the objective pertaining to the dissemination of information (objective 3.1) was achieved.

SECTION V

SUMMARY OF EVALUATIVE INFORMATION AND CONCLUSIONS

This project was designed to serve as an educational intervention providing direct services to approximately 40 high risk (low birth weight - less than 5½ pounds) 3-, 4-, and 5-year-old children, including the integration of handicapped children, living in the area served by the Clovis Municipal Schools.

The evaluation design for 1977-78 focused primarily upon the program objectives as pertains to student achievement. Also, the objectives pertaining to in-service training and dissemination of information were assessed.

Summary of Evaluative Information

The major findings of this 1977-78 evaluation study were:

1. Students participating in REEEP made significant gains in language development in English (objective 1.1), language development in Spanish (objective 1.2), and school readiness (objective 1.3).

2. Students participating in REEEP showed a positive and continuous growth as concerns self-concept and emotional development.

3. The regression analysis data indicated that 60% of the students scored better than estimated/expected on the English test (PPVT), 40% scored better than estimated/expected on the Spanish test (TACL), and 70% scored better than estimated/expected on the school readiness test (RTDC). Also, it was found that the highest correlation of any of the independent variables was the educational level of the mother.

4. The in-service training provided to the teacher and aide was found to be successful and effective.

5. The quantity and quality of the dissemination activities of the project were adequate.

CONCLUSIONS

Based upon the findings of this study, the major conclusions were:

1. The objectives pertaining to language development in English (objective 1.1), language development in Spanish (objective 1.2), and school readiness (objective 1.3) were satisfactorily achieved.

2. The objectives pertaining to in-service training (objective 2.1) and dissemination of project information (objective 3.1) were satisfactorily achieved.

3. The project had the organization, curriculum, facilities, and a qualified and dedicated faculty/staff to provide the needed educational experiences for the target children; therefore, it was concluded that REEEP served as an effective educational intervention for the specified target children.

BIBLIOGRAPHY

1. Alford, Gay. "Incidence of and Factors Relating to Prematurity and Low Birthweight in the Spanish American Population in Clovis, New Mexico." Unpublished Ed. Sp. thesis, Eastern New Mexico University, 1972.

2. Alford, Gay, and Ainsworth, Len. "Lunch Learning in An Early Childhood Program." Education-New Mexico, 5 (Fall, 1974), 10-14.

3. Ainsworth, Len and Alford, Gay. "The Talking Kids Diet." Early Years, (April, 1973), 25-27.

4. Ainsworth, Len, et al. Responsive Environment Program for Spanish American Children: First Year Evaluation Study, Final Report, 1971-72. Bethesda, Md.:ERIC Document Reproduction Service, ED 068 219. Abstracted in Research in Education, (February, 1973), 94.

5. Askins, Billy E., et al. Evaluation of the Effect of An Early Education Program for "High Risk" Spanish American Children: Second Year Evaluation Study, Final Report, 1972-73. Bethesda, Md.:ERIC Document Reproduction Service, ED 085 122. Abstracted in Research in Education, (April, 1974), 109.

6. Askins, Billy E., et al. Responsive Environment Program for Spanish American Children (REPSAC): Third Year Evaluation Study, Final Report, 1973-74. Bethesda, Md.:ERIC Document Reproduction Service, ED 096 086. Abstracted in Research in Education, (January, 1975), 120.

7. Askins, Billy E., et al. Responsive Environment Program for Spanish American Children (REPSAC): Fourth Year Evaluation Study, Final Report, 1974-75. Bethesda, Md.: ERIC Document Reproduction Service, ED 111 562. Abstracted in Research in Education, (January, 1976), 141.

8. Askins, Billy E., et al. Responsive Environment Early Education Program: First Year Evaluation Study, 1975-76. Bethesda, Md.: ERIC Document Reproduction Service, ED 127 058. Abstracted in Resources in Education, (December, 1976), 117.

9. Askins, Billy., et al. Responsive Environment Early Education Program: Second Year Evaluation Study, 1976-77. Bethesda, Md.: ERIC Document Reproduction Service, ED 142 351. Abstracted in Resources in Education, (December, 1977), 125.

10. Askins, Billy E., et al. Responsive Environment Early Childhood Program Third Year and Final Evaluation Study, 1977-78. Education Resources Information Center, submitted.

11. Askins, Billy E., et al. Outreach Activities of the Responsive Environment Program for Spanish American Children: First Year Evaluation Study, 1975-76. Bethesda, Md.: ERIC Document Reproduction Service, ED 127 057. Abstracted in Resources in Education, (December, 1976), 117.

12. Askins, Billy E., et al. Outreach Activities of the Responsive Environment Program for Spanish American Children: Second Year Evaluation Study, 1976-77. Bethesda, Md.: ERIC Document Reproduction Service, ED 142 352. Abstracted in Resources in Education, (December, 1977), 125.

13. Askins, Billy E., et al. Outreach Activities of the Responsive Environment for Spanish American Children: Third Year Evaluation Study, 1977-78. Education Resources Information Center, submitted.

14. Askins, Billy E.; Ainsworth, Len; Alford, Gay. "The Effectiveness of the Responsive Program for Spanish American Children of Pre-School Age - A Demonstration Project." Paper presented at the annual meeting of the Texas Association of Supervision and Curriculum Development, McAllen, Texas, October, 1973. Also, paper was published in Education-New Mexico, 4 (Winter-Spring, 1974), 22-30.

15. Askins, Billy E., and Cornett, Joe D. "Effect of the Responsive Environment Early Education Program for Low Birth Weight Children of Preschool Age." Paper presented at the annual meeting of the American Educational Research Association, New York City, April, 1977. Abstracted in AERA Paper and Symposia Abstracts, (1977), 81.

16. Cornett, Joe D.; Ainsworth, Len; and Askins, Billy E. "Effects of An Intervention Program on 'High Risk' Spanish American Children." Journal of Educational Research, (April, 1974), 324-343.

17. Cornett, Joe D., and Askins, Billy E. "Multiple Correlation As An Extension of One Group Evaluation Designs." Paper presented at the annual meeting of the American Educational Research Association, San Francisco, Calif., April, 1976. Abstracted in AERA Paper and Symposia Abstracts, (1976), 49-50.

18. Cornett, Joe D., and Askins, Billy E. "The Long Range Effects of a 'Special' Intervention Program for Low Birth Weight Children: Some Findings and Methodologies." Paper presented at the annual meeting of the American Educational Research Association, Toronto, Canada, March, 1978.

19. Medley, Gene W., and Askins, Billy E. "Investigating the Relationship Between Birth Weight and School Readiness of Preschool Mexican American Children." Texas Tech Journal of Education, 1 (Numbers 2-3), 119-125.

APPENDIX A

DESCRIPTION OF INSTRUMENTS

A brief non-technical description of each of the test instruments is listed in the following paragraphs. Personnel interested in more detail concerning the tests are invited to consult technical data provided by the publishers of the tests or refer to the Mental Measurements Yearbook, Buros, editor.

Language Development

English

The Peabody Picture Vocabulary Test (Dunn) is designed to provide an estimate of a subject's "verbal intelligence" through measuring his hearing vocabulary. The test also has wide utility as a clinical tool. Besides being effective with average subjects, it has special value with certain other groups. Since subjects are not required to read and the responses can be non-oral, the test is especially fair to non-readers and remedial reading cases. With the drawings free of fine detail and figure-ground problems, the test is apparently appropriate for at least some perceptually impaired persons. According to the Test Manual, the scale is appropriate for subjects 2½ - 18 years who are able to hear words, see the drawings, and has the facility to indicate "yes" and "no" in a manner which communicates.

This standardized test is published by American Guidance Services, Inc., Circle Pines, Minnesota.

Spanish

The Test for Auditory Comprehension of Language (Carrow) measures the child's understanding of the Spanish language structure. The test is composed of 101 plates of pictorial referents. The child responds to each of the examiner's oral stimuli by pointing to one of three line drawings. Responses are recorded on a separate scoring/analysis form. The test is designed for individual administration by speech and testing specialists. Test results can also be used to diagnose the language competence of bilingual and mentally retarded children as well as those with hearing, articulation, or language disorders.

This standardized test is published by Learning Concepts, Inc., Austin, Texas.

School Readiness

The Readiness Test for Disadvantaged Pre-School Children (Walker) was adapted from the final report of a project conducted by Dr. Wanda Walker, Northwest Missouri State College, and supported by the Office of Education. The test consists of multiple-choice items based on pictures and symbols which do not require reading ability and are designed to test a child's listening ability; visual ability; and his recognition of similarities, differences, numerical analogies, and missing parts.

This standardized test is available from ERIC Reproduction Service (ED 047 168), Bethesda, Maryland.

Self Concept and Personality Development

The Developmental Profiles (Bessell and Palomares) is a subjective evaluation of children's behavior under a variety of circumstances. These rating scales are prepared periodically jointly by the teacher. The teacher makes ratings on a printed form according to six affective areas: awareness of self; self-confidence; interpersonal comprehension; sensitivity to others; effectiveness; and tolerance. Because of the inherently subjective nature of these profiles, there is no objective scale of accomplishment or standard in terms of age-achievement scores. The profiles can provide a source of insight and understanding of emotional and personality development.

This instrument is published by the Human Development Training Institute, El Cajon, California.